

TWIN CITY ATARI INTEREST GROUP NEWSLETTER

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1983

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DECEMBER MEETING NOTES
BY MD

The Dec. meeting was held on Jan. 2nd, rather than the last Sunday of Dec. due to the holidays, with the swap meet beginning at 5:00.

It was noted that ATARI has announced the release soon of a new computer, the 1200XL, which is to be able to run software that can be run on the 800/400. Also soon to be released is a new printer and a plotter, along with a new cassette recorder. (Hopefully the recorder is an upgrade, present models can hardly afford a downgrade!)

We got together more than enough subscriptions to ANALOG to recieve the disk version for the club. Those who are subscribers will have access to it at club meetings. Those who are not subscribers are reminded of the copyrighted nature of the disk ANALOG was good enough to offer.

A "modem poll" was taken and about 22 members now own modems. 10 indicated they would buy a modem if TAIG had a Bullitan Board System (BBS). About 10 responded that they would donate \$10 to fund the BBS. Other possibilities were mentioned for funding and while no absolute decision was made to commit any funds to a BBS the effort will be made to proceed in slow gear towards the goal of a BBS.

Several rumors were heard that COMPUTER CASTLE is or soon will be no longer servicing ATARI. However a new repair center is now open at 5401 Boone Av. N. called ENTRONIX. phone 537-2121. They are presently offering no discount to TAIG members.

TAIG now has 255 members, not counting the people who joined at this meeting. Also there is around \$1100 in the treasury. (This sounds lke a lot of money, but the cost pf printing and mailing the newsletter with first class postage is over \$100 a month and will climb as membership climbs.)

The idea of having help sessions before meetings was suggested with about 6 people being interested in attending. Due to the lack of interest, no followup will be attempted. It was pointed out that the newsletter is available for anyone wanting to put a question to the membership.

Tony Walsh announced that the St. Paul group is doing a group 48K upgrade for 400's which should cost around \$55. Anyone interested can participate. Call Tony at 444-5968.

REVIEW: SPELL WIZARD
BY TRB

Spell Wizard is a recent release by Datasoft which retails for \$79.95. This is a very impressive spelling checker for the ATARI computer. Containing a dictionary of over 33,000 words, the checker can process a standard DOS text file at a rate of 600 words a minute. It allows you to interactively correct the incorrectly spelled words that it finds or to add them to your own user dictionary. The user dictionary would contain words like ATARI, TAIG, or other words not normally found in a dictionary, but spelled correctly. Spell Wizard also has a search function that you can use to find the correct spelling for a given word. Even wild-carding is supported (i.e. find every word that starts with 'anthro'.) This would certainly be useful for any editor of a small newsletter to check the typing of all the columns (hint!).

REVIEW: JOURNEY TO THE PLANETS
BY TRB

This is the latest release from JV software. Like their Action Quest and Ghost Encounters, Journey to the Planets is first a mind game where you have to discover how to get a specific treasure. J to the P also has the added feature in that you get to play a sort of lunar lander game to get from treasure to treasure. The basic premise to this game is htat there are 7 planets in the system which you have to visit and obtain the treasures from. On the planets, you walk around learning how to use objects to get the treasures. Taking off and landing on planets is almost a game in itself and traversing interplanetary space can be challenging as well. What with comets and running low on fuel. This is a good game for you puzzle solvers. Good graphics and sound.

SOFTWARE/HARDWARE NOTES
BY TRB

Here are a few tidbits of info I heard recently. Did you know that...Miner 2049er had ROM problems-will be released in March now...a recent release from Broderbund Software called Deadly Secrets Adv. #1 has been discontinued (according to SOFSEL)... The ATARI 800 with 48K memory is available for <\$500 mail order... Suggested Retail around \$595...WARNER/ATARI has bought most of the available holographic (3D) patent rights in the US...ATARI is apparently pushing strong into R&D in Fantasy types of games...the ATARI 1200 has been announced...ONLINE Computer centers have the new 400 keyboards on display-impressive and going fast....Night Mission has been released for the ATARI under the name of PINBALL by Sub-LOGIC (an excellent game on the APPLE)...a number of announced games still haven't been shipped-Basic Compiler, Zaxxon, Labyrinth, QIX, DIG DUG, ODESTA CHESS, and ODIN to name a few.

I just got back from the CES in Las Vegas. For those of you who don't know what CES stands for, it is Consumer Electronics Show. A lot of new hardware and software were introduced to the retailers. I am not going to go into the new hardware in this article but maybe I will write about it in another article. This one is dedicated to games, right?

It is really hard to decide where to start so I am going to list programs in the order that I pick up brochures. The first on the top of the pile is a program from Affine Software called Star Trap. It is basically a two player space shoot-em-up game. I didn't see any prices listed anywhere so I can't tell you how much.

There was a company called ROMOX at the show. They have 5 cartridges for our computer. The first is Anteater. You, as an ant, must get the sugar cubes on the surface and bring them back for your colony. Beware, there is one or more anteaters running around. You can tunnel anywhere you want but the anteater can only go where you have been before. If you tunnel underneath a rock you might get it to fall down and kill the anteater or block its pursuit. I thought this was a very interesting game. Then there was a program called Fortune Hunter. You are in search of treasure inside a castle (I think). This game reminds me of the arcade game called Venture. Princess and Frog was the next one. It looks to me like it is a Frogger type game. You are a prince turned into a frog and must run past the jousting knights and over the creatures in the moat. If you like Frogger games but don't like loading a disk or cassette then this cartridge may be for you. The next program is one we have demonstrated at our meeting before. It is called Attack at EP-CYG-4. The only difference is that it is now on cartridge and has only one level. The last game ROMOX had was Typo. It is cartridge typing tutor. You can set your typing speed and it will give you words to type. If you do it right, it will move you through a pac-man like maze with dots. You get points for every dot you eat but if you goof it will not move you as far. This might be an interesting typing program. There are six other titles announced but I didn't get to see them and I do not know what they are about. They are Nitro, Sea Chase, Eliminator, Whiz Kid, Mama Mia, and Beauty and the Beast. All these programs are cartridges so they will be priced at \$45.00 retail. Attack is \$50.00.

The next company I picked out of the grab bag is CBS Software. They are the ones who bought out K-byte or something like that. Did they ever have a lot of cartridges available. Other than K-Star Patrol, Krazy Antiks, and Krazy Kritters which you probably have heard about before, there were programs called Boulders and Bombs, Mountain King, and Time Trials. Boulders and Bombs is a game where you are on an alien planet being harrassed by hostile vultures. You dig underground and try to find time bombs to get rid of the obstacles the vultures create for you. Then there was Mountain King. If you really love ladder games, then this is for you. The king is lead around by your joystick up and down ladders and runs left and right. He has to collect 1000 points in diamonds (I am not sure if it is a point a diamond) and then he is allowed to find the treasure chest. It is hard to see under the mountain so they give you a flashlight. This is the only way you can find the treasure chest. But, beware, there are creatures down there that really enjoy a truly royal feast and since you are a king what could be better? The last new cartridge from CBS is Time Trials. This is an educational program (hear that Bill!) where you are racing a car towards forks in the road. You must decide which one will get you to your goal as fast as possible. You can choose the level of difficulty based on your math abilities. This is recommended for ages 5 thru 10. All these cartridges sell for about \$50.00 dollars on the retail market.

Now for some exciting news. I talked to the people at Datamost and they told me that almost all their games for the Apple were going to be translated to the Atari with a release date sometime in the summer. This includes games like Swashbuckler, Aztec, Tubeway (Tempest like), Thief, Pandora's Box and many others. Wait for some of these. I personally like Swashbuckler.

Steve Crowley and I also got to talk to Fernando Herrera down there. He demonstrated his Astro Chase program for us. It is a really nice program but not spectacular. I think most people will enjoy this one. It retails around \$30.00. We can, as a group, make a big purchase (20 or more) and receive a 40% discount. Talk it over and see what you decide.

Thorn EMI had a large display area down there. They were kind enough to demo their latest programs. River Rescue is one. You have a boat and are charged to rescue the stranded explorers. You must avoid or shoot the obstacles in your way or you lose the boat. Get the three lost explorers and return them to the hospital and you will get your bonus. This game uses fine scrolling and comes on a cartridge. Mutant Herd is another of their programs. You must destroy the plutonium-crazed mutants and their eggs with your carefully placed bomb. You must descend into the bowels of the colony using only two laser gates to prevent them from swarming over you. Interesting concept in this game. Another product from Thorn is called Save the Seven Seas. The scenario is that in the future man dumped nuclear wastes in drums into the seas. Naturally these drums leaked and caused all kinds of damage to oceanic life. Man finally realizes his mistake and must retrieve the drums but the mutant fish are creating a problem. Hurry up and don't let that radiation-hungry octopus get you. Here is program I must have. It is called Major League Hockey. It realistic enough that I can go around and check everybody to the ice. This game uses fine scrolling to move up and down the ice. A must! The funniest program I saw at the show was Orc Attack. You, as the king, must prevent the orcs from entering your castle. They try to storm it using ladders. The king can drop rocks and boiling oil on them but watch out they also shoot arrows. This program I think a lot of people will enjoy. All these programs from Thorn EMI are cartridges and retail for \$50.00.

I visited the Sirius Software booth and found these programs that will be released for the Atari. Critical Mass, Repton, Twerps, Flip Out, Blade of Blackpoole, Kabul Spy, and Wavy Navy. All these are disk programs and range from \$35.00 to \$40.00. I am looking forward to Blade of Blackpoole and Kabul Spy. These are hi-res adventures that uses full sentence commands similar to Infocom's programs. They are releasing a lot of ROM cartridges also. They are Fast Eddie, Turmoil, Fantastic Voyage, Worm War I, Flash Gordon, Deadly Duck, Fall Guy, Earth Dies Screaming, Space Master X7, Gus Hog, and Budball. These roms will sell for \$35.00 except that Flash Gordon will sell for \$40.00.

Synapse Software has some more programs coming out. Necromancer is a very interesting arcade style game. You are attacked by the forces of evil and your legions are trees. Defend yourself and kill all evil. Shadow World is a game with two independent screen displays but that is all I know about it. Then there was Slam Ball. This is an interesting variation on the pinball theme. You are the pinball. Drelbs is another program I didn't get to see but it sounds like it is a shoot-em-up. Fort Apocalypse should finally be out. It reminds me a little of Choplifter but you have to refuel your helicopter. The last new program is called Reptilian. I do not know what it is. All these will be released shortly on cassette, disk, and cartridge. Take your pick.

I visited the Broderbund booth and found a very good program called A.E. It is a shoot-em-up but the graphics are fantastic. This is for a 48k system. It looked like Broderbund is translating everything to the Atari including (I hope) the Arcade Machine.

Datasoft had a demo of a program that I must have. The program is Zaxxon and is it very good. The scrolling is smooth and the graphics were sharp. The true arcade should get this one and stop wasting quarters. This looks better than the Colecovision version of the game. Talk about the arcade experience. Other programs due for release are Fathom's 40, O'Riley's Mine, Moon Shuttle, and Rosen's Brigade. All these are arcade style games.

Parker Brothers, who make video games for the Atari VCS, hinted that they were making computer versions for the Atari 400/800/1200 series. But there is nothing definite yet. I would like to see their programs called Q*Bert and Popeye done for us.

Activision also hinted that they might make programs for the computers. Can anyone imagine what Pitfall would look like on a real computer?

Imagic, makers of video games for the VCS also, have come out with two translations of their programs. Available soon will be Demon Attack and Atlantis. Personally I like the Demon Attack on the Intellivision better.

Look for 20th Century Fox to come out with games for the Atari computers.

On the whole there were a lot of new programs shown down in Las Vegas. There were quite a few good ones but also a lot of junk. Just remember before you buy a program try to get the dealer to demo the program for you.

I have had requests for the top games in my library again so you know what to buy. Here they are.

David's Midnight Magic	Broderbund
Cypher Bowl	Artsci
Star Raiders	Atari
Frogger	Sierra On-Line
Shamus	Synapse
Picnic Paranoia	Synapse
Submarine Commander	Thorn EMI
Zork I, II, III	Infocom
Bandits	Sirius
Way Out	Sirius

They are not necessarily in that order but that is the way I have them arranged in my notebook. The ones I like tend to move towards the front.

I am going to give you the top ten according to Softsel.

Frogger	Sierra On-Line
Choplifter	Broderbund
Centipede	Atari
Pac Man	Atari
Wizardry	Sir-Tech
Shamus	Synapse
Deadline	Infocom
Canyon Climber	Datasoft
Zork I	Infocom
Krazy Antiks	CBS-Kbyte

You will notice that all but one are available for our computer. This goes to show you how our computer is moving in the market. With results like these we should see more and better programs come out.

Oh, if you were wondering, yes I did visit the Atari booth. The 1200XL looks like a slick computer. But I don't think the computer hack will like it over his 800. Atari also has bought the rights to Donkey Kong and hopefully it will be out soon. Dig Dug and Qix should be out very shortly. This doesn't have to do with games but I want to mention that Atari has bought the rights to PAINT that superb painting program.

There were a lot of new joysticks demonstrated down there and I will write about those in a future article. Atari and Sierra On-Line settled their suits about the program called Jawbreaker. But, it looks like Atari is still going strong after anyone who has a Pac Man look alike. We were watching a demo of a program called PC-MAN from Orion Software on the IBM PC. An Atari Corporate lawyer came up to the booth and told the salesmen to turn off the display and they can't use that program for demonstration purposes. Then he went walking off with one of them to have a talk. I think Atari is trying to strangle the market. They certainly are not earning any brownie points with the users by choking off new programs. Everyone should write to Atari and tell them what they think of their policies. I will provide an address to write to at the meeting if anyone else is interested.

By the next meeting I should have some of the new programs announced above so I hope you will come to see them.

NEWS FROM THE LIBRARY

Guess it will be a surprise grab bag this month. -TRB

FROM THE EDITOR

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I don't believe it...Not one article was submitted this month. At the time of this writing, Phil was the only one with an excuse (at the CES in Los Vegas), so I will have to assume that everybody else is still trying to recover from New Years' Eve. I will repeat what I have said in earlier issues. I will print almost anything that is submitted. How about some software reviews or helpful hints? Any takers? 542-1027.

Ignore the first couple of sentences above...I got Phil and RDJ's articles after the first layout of this newsletter, but thought it best to include them.

DISK ARCHIVING
by TRB

This month I am going to cover the fundamentals on backing up those hard to back up game disks. First I should remind you that you must have some sort of disk editor (such as DISKEDIT, DISKASM, or DISK DETECTIVE). You will also need a Sector Copy program such as ULTRACOPY or SUPERDUP. DISKEDIT does have a sector copier built in, but you can only copy 150 sectors at a time (between swaps of the source and destination disks) unless you have two disk drives. I should also caution against trying to sell copied software or selling the originals and keeping the copies. This is clearly against the law. The only reason to copy a game is for backup protection in case you destroy the original accidentally.

Before going into the ways to get around copy protection mechanisms, I will give a brief description of how the ATARI reads and writes data to and from a disk. After looking through my notes on my presentation to the SPACE group on this subject I think I had best start at the beginning. An ATARI 810 diskette (when formatted) is composed of 720 sectors of 128 bytes each. The sectors are numbered from 1 to 720 and are arranged on the diskette in groups of 18. Each group of 18 is called a track and is best thought of as a ring of sectors on the diskette that can be accessed by the head with minimal movement. Movement from track to track can be heard when reading or formatting diskettes (unless you have greased your rails recently.)

The ATARI performs Disk I/O in much the same manner that it performs I/O to other peripherals. Basically, several memory locations are reserved in memory as pointers. To perform a disk operation, a program must do a jump subroutine into the OS at a particular point (JSR \$E453 or JSR \$E459; JSR \$E453 sets up some pointers and then jumps into \$E459) and the OS will inspect these memory locations to decide what has to be done. The memory locations tell the OS what sector to read/write, where in memory to read/write the data from/to, what operation to perform (i.e. read/write/format), what disk to do the operation to, and how many bytes to transfer (128 for the ATARI 810, 256 for a double density drive.) The memory locations are as follows: \$301-disk drive number (0-3), \$302-disk operation (\$52=read,\$21=format disk, \$57=write), \$304&\$305-memory location for data I/O, \$30A&\$30B-Sector number, and if JSR \$E459 is used then \$308&\$309 must contain the number of bytes to transfer and \$303 must be set up with \$80 for a write operation and \$40 for a read operation (\$303, \$308, and \$309 are set up by JSR \$E453). The OS will return a value in memory location \$303 and the Y register to indicate the successfulness of the last disk operation. A successful operation will return a 1, otherwise a negative number >\$7F is returned. Knowing just this much, it is possible for most people to back up game disks that are protected with simple bad sector checks. Using a disk editor, you can find out which sectors are bad and then disassemble the program to find out where it stores a bad sector pointer into memory locations \$30A and \$30B. The following JSR \$E453 or JSR \$E459 can then be no-oped out or converted to a LDA \$80, TAY to simulate a bad sector read. Be warned that some games do a checksum of the sector containing the bad sector check (to see if you changed the code), but this can usually be sidestepped by switching the values that are stored into \$30A and \$30B instead of no-oping the JSR out (i.e. if the original bad sector was \$30A=\$0 and \$30B=\$13, setting \$30A to \$13 and \$30B to \$0 will tell the OS to try to read sector \$1300 and return an error code since that sector doesn't exist.) Note that the ATARI reads two byte addresses second byte first. As I indicated last month, there are a variety of ways to change the arrangement of sectors on a disk, and a game program will be written in such a way that it expects to see just such an arrangement (i.e. a specific bad sector, double sector, or a checksum sector.)

Disks that are protected with double sectoring (i.e. two sectors with the same number) are a little more difficult to back up. Usually, these are the disks that read in silently. The only way to find a double sector on a disk is to locate the bad(missing) sectors and then search the sectors that are adjacent to the missing ones (i.e. a missing one is just one that has been renumbered to become a double one). To identify a double sector, you must read in the suspect sector, note the first couple of bytes in the sector, and then read the sector again before the disk drive powers down (you have to do this so that the heads will be positioned correctly). Compare the bytes that you saw before with the new ones and you can usually see a double sector fairly easily. Once you find a double sector, do a sector copy of the disk onto a blank disk and then read the double sector until you get the 'second' sector and write this on the destination disk in the sector that was bad on the original disk. I must stress here never to write anything out to your original disk. Once you have copied all of the data including bad sectors over to the backup disk, you must go into the code and determine where the game is reading in the double sector. When you find this spot, you can usually just increment the sector pointer (\$30A,\$30B) by editing the code (i.e. change where it tries to read the same sector twice) and you will be all set. Some games scramble their code, but most disk editors have boolean unscrambling capability, so this is no problem. If you don't let the thought of assembly code overwhelm you, you will soon find that backing up software is relatively easy and quite interesting if you take time out to look at the actual game code. You will also discover that many of the more recent games are protected in quite complex, but surprisingly simple to break methods.

Next month I will answer any questions that anyone has on this series of articles. I agree with Phil's comment in the last newsletter that the cost being added to software for protection schemes is getting ridiculous. Maybe if everyone becomes conversant in backing up their own software, the developers will just stop protecting the software and drop costs down to a reasonable price range. These aren't the days when there were just 10,000 ATARI computers out there and a high cost was justified based on percentage sales. Any comments from anyone on this subject?

USEFUL DISK INFO
By TRB

After getting some questions after last months' correspondence column, I realized that many Atari Disk drive owners apparently don't clean their disk drives at all. While the recommended procedure of cleaning your drives several times a month is a little extreme, I think that most users should clean their drives at least once every 2 or 3 months. The main reason in cleaning disk drives is to protect your disks and your heads from abrasion. Your heads pick up dust and often build up quite a bit of the disk material (alumina) on them, causing disk scratching and subsequent data loss. Small chunks of this material can also end up scarring your heads and reducing the lifetime of the unit. A simple cleaning kit is much cheaper (\$20-\$30) than having to replace your heads or losing valuable data.

I hope to have an update on the debate over which disk is safest for the ATARI disk drive by next months' newsletter.

REVIEW: JEEPERS CREEPERS
By TRB

Well, if you liked KID GRID, you will really like JEEPERS CREEPERS. This is a fairly addictive game from Quality Software (29.95 retail) where you are chased around a grid by wasps while you are trying to completely surround certain squares on the grid. If you surround some squares a Wasp-eating beetle comes out and chases down the wasps. Survive one grid and you continue to harder and more complicated grid structures. Quick action and good sounds.

MORE ABOUT FILES
BY MD

Last month I wrote a short blurb about standardizing file extender names, those three letters that appear after the period in a file name. The most common use of these three "extender" letters is to designate the kind of file it is, rather than simply three more letters to use to name the file. For instance, if a game of BLACKJACK in machine code is given a filename of BLAKJACK.OBJ it means a lot more than naming it BLACKJAC.K or BLACKJAC.KOB.

While the individual user is free to use these three extender letters as he pleases, a standard should be established for those users who see the merit of having one.

Furthermore there should be an understanding of the actual differences among these file types so that they mean more than just three different letters at the end of a file. As I wrote that blurb last month I realised I had no more than a primitive understanding of those differences myself, and therefore solisited the aid of Phil Seifert and my De Ra manual to educate myself and share that knowledge in this article.

First, lets pretend that you have a disk that someone simply didn't bother to use the "standard" file extenders on and you don't have the slightest idea what kind of files are on the disk. You try LOADING a few but mostly get ERROR 21, which means you aren't guessing right as to what kind of files they are. Here are some hints to help you figure them out.

OPEN the file in question by OPEN #1,4,0,"D:FILENAME.EXT Look at the first 6 bytes by F.I=1 to 6:GET#1,A:?A:N.I

These first 6 bytes will often give a good hint as to the kind of file you have. Looking particularly at the first two, a table can be made to, if not give a positive identity, at least eliminate some possibilities.

FILE	LABLE		1st BYTE	2nd BYTE
ATARI BASIC	SAVED	SAB	0	0
ATARI BASIC	LISTED	LAB	NOT 0	NOT 0
BASIC A+	SAVED	SAP	0	0
BASIC A+	LISTED	LAP	NOT 0	NOT 0
MICROSOFT BASIC	SAVED	SMB	0	NOT 0
MICROSOFT BASIC	LISTED	LMB	155	NOT 0
ASSEMBLER/EDITOR	SOURCE	SRC	NOT 0	NOT 0
GENEREL DATA		DAT	NOT 0	NOT 0
ASSEMBLER/EDITOR	OBJECT	OBJ	255/134	255/9 DOS II/DOS I
"	OBJECT	COM	255	255

This COM file needs some special attention, since there should be a meaningful difference between it and OBJ. An OBJ file should NOT run when it is loaded with the L or BINARY LOAD option of DOS. This is because the file should not have been set up using the AUTOMATIC RUN in DOS. To get an OBJ file to run one should have to use the RUN AT ADDRESS option with DOS.

On the other hand, a COM file SHOULD run, because it should have been saved with the AUTOMATIC RUN method (see the DOS manual for how to). Don't confuse the AUTOMATIC RUN feature with the AUTORUN.SYS file, we are not talking about the same thing. The AUTORUN.SYS carries the whole idea one step further in allowing the file to automatically be "booted" after DOS is booted. This characteristic is notated with the whole file name being AUTORUN.SYS rather than only a special extender notation.

Anyway, back to the first two bytes of a file. We can see that if they are 0 and 0 it is probably a SAVED ATARI BASIC or BASIC A+ program. This would be the tokenized program, which would have been successfully LOADED in. There is a difference in tokens between these two BASICs however and if you have LOADED in a BASIC A+ with ATARI BASIC or verse vicea you will see a strange looking program when it is listed. Needless to say- it won't run.

If the first two bytes are 0 and some other number, it is probably a MICROSOFT BASIC program.

If they are 255 and 255 it is probably a OBJ or COM machine language program. Can you tell the difference from the first 6 bytes of the file? No, the COM file will have some data appended to the END of the file, plus the last disk sector that the file is on will have a byte of data that isn't ever seen in the file itself. How that data gets there is a subject for another article.

That leaves us with the first two bytes being something other than 0 or 255. This involves several possibilities. It may be a DAT (data) file but if the first byte is 155 it could be a LISTED MICROSOFT BASIC, or if you have any old DOS I files hanging around that were OBJect code then...

(This was the end of the file Mike...gonna finish it next month? -TRB)

MINNESOTA MICRO FORTH
BY RDJ

The December meeting of Minnesota Micro FORTH was held on the 16th. Nominations for officers were opened. The next meeting will be the 13th of January at the Minnesota Federal in North Town. An informal (read unprepared) tutorial on <BUILDS DOES> was given along with a demonstration of Phil's gunfight at OKEY DOKEY and a demonstration of val-PAR's val-DOS extensions to val-FORTH.

val-DOS looks to be a good package one of the better ones val has put out. It does take a lot of memory to have the file editor and the DOS words in the dictionary but the nicities of the editor and compatibility with ATARI DOS make it worth while for those people who enjoy the DOS file structure compared to the FORTH SCREEN format.

The answer to the proverbial question what should I do when I see : 4th love if honk is to honk! Thats all for now :-) RD

BUILD YOUR ATARI A TABLE

by Steven Berg, Philippine Islands

My Atari 800 had been sitting on my coffee table for far too long. It was time for a new home with a reasonable price. One can build this table for the Atari and accessories with one sheet of 3/4" plywood and little else.

Begin by cutting the plywood into the sizes shown in figure 2. Glue the 20" length of F1 to the 20" length of F2. Allow to dry for 24 hours. I will describe the construction as if you are facing the table as shown in figure 1.

If you want the rear of piece B to be flush with sides A then reduce its width from 23 1/2 to 22 3/4 inches. If you have an MX-80 size printer, then cut the hole for the paper beginning 2" from the front and 4" from the right side of piece B. Cut the hole 1" in width and extend it to the left 12" so as to make a 1x12 inch slot. Move 3" to the left of the left edge of the paper slot and cut a second hole 2" from the front 1" in width and extend it to the left 3". The second hole is for your electrical connections.

If you have an MX-100 size printer, shorten side A (right) by 6" so that side A (right) will be flush with piece B and begin the paper slot described above 2" from the right edge of piece B instead of 4" and extend it 14".

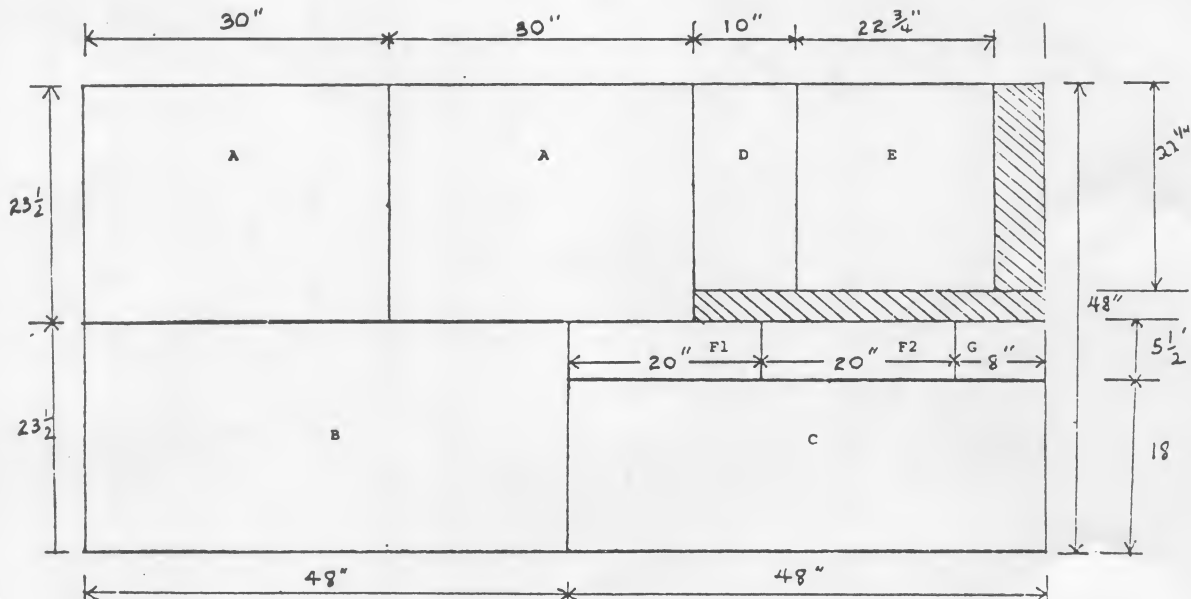
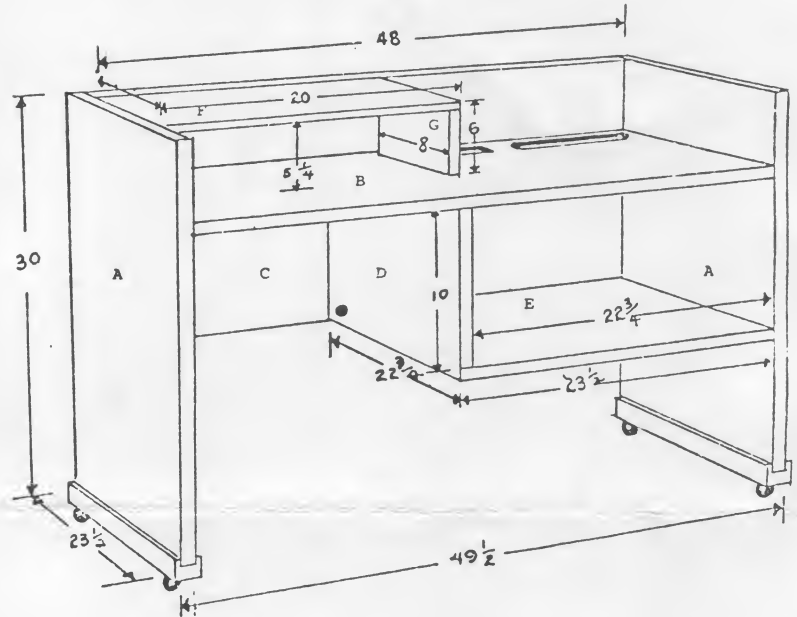
Nail and glue piece C to B and then nail sides A to B & C. Cut a hole for the power cord on the lower front of piece D. Nail and glue side E to piece D. Be sure not to do the reverse (nail D to E) or you will not have enough room to stack two disc drives on the shelf formed by the two pieces.

Nail and glue D & E to C, B and A (right). Cut 1/4" from the height of piece G (to make it 5 1/4"). Nail and glue piece F (F1 & F2) to piece G making sure there will be a 2" gap between G and C when it is attached on the table. Nail and glue piece F, G to pieces A & C (F only) and B (G only).

Cut a 3/4 by 3/4 inch groove in two 23 1/2 inch long 2 x 2's. Place the bottoms of the side A's in the grooves and nail the 2 x 2's to the bottoms of the sides. Drill the appropriate hole for your casters in the 2 x 2's and install the casters.

I used a 1/4 x 3/4 veneer for the plywood edges. An alternative is wood veneer tape. Recess all the furniture nail heads with a punch and fill all the holes with wood putty. Sand the table. Stain as desired and rub it with tung oil. I used 1 1/2" furniture nails, brads for the veneer and six 2" furniture nails to attach the 2 x 2's. You may want to use one of your extra pieces of plywood to separate the computer paper on the shelf from the electrical power supplies behind the disc drive which sits on the left side of the shelf. I placed the power supplies for my 800 and my 850 interface below the shelf for my monitor and between piece C and my 800.

This is reprinted from A.C.E., the Eugene, Or. ATARI Newsletter.



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ANNOUNCEMENT

PAGE 8

ATARI SOFTWARE 25-30% OFF

Note to prospective PAINT buyers: ATARI has reportedly purchased the rights to the PAINT program from the CAPITOL CHILDRENS' MUSEUM of Washington DC. This means two things; PAINT will probably be pulled off the market for a period of time and also it will likely be more expensive when it is back with new packaging. I will be putting one more order in on PAINT towards the end of this month, so if you want to get it, you should send me the \$28+\$1.25 shipping at or before the next meeting. Since this is a \$39.95 program, it is selling fast.

DISKETTES: \$19/BOX OF 10, \$18/BOX-3 BOXS, \$17.50 BOX-5 BOXS

NOTE TO DISKEDIT AND ULTRACOPY OWNERS (and everyone else)

First the good news. Diskedit 2.0 is now out and selling quite well. ONLINE COMPUTER CENTER in Hopkins is pretty well stocked, so go in and see if they have read the instructions yet (ask for a demo). This release includes auto-search features (i.e. search for every JSR \$E453 and disassemble the code around it), mass-calculate options, an RPM tester, memory view/edit (different from sector view/edit), full assembly speed mapping with more user control, faster screen display, two-way data transfer, default mode user prompting, and several more new features. Ultracopy has been upgraded to handle write without verify. Both programs have been rewritten to be more compatible with the Percom double density disk drive which I plan on getting soon (i.e. the DISKIO routine now has a density parameter that can be passed into it). Diskedit 2.0 is available to Diskedit 1.0 owners for the standard \$5.00 upgrade fee (\$22.00 to new buyers). The ULTRACOPY update is free if you want to bring your disk to the meeting and trade for an update (\$20.00 to new buyers, \$12.00 to DISKEDIT owners). Why the free update? That is part of the bad news. I found a minor mistake in the first release of ULTRACOPY. You probably will never see the bug unless you try to back up either FILEMANAGER+ or the ATARI macro-assembler, but I feel it is best to just replace the version with a new one. Also, DISKEDIT 2.0 owners that bought the January 2 release on January 2, contact me at the next meeting to get a free update (I added and fixed some stuff, so bring your old disk.)

To order software, send check or money order (include \$1.00 shipping/\$1.25 for PAINT) to:

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Next TAIG Meeting:
Sunday, January 30, 1983
TAIG - 7:00 P.M.

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